What is claimed is:

1. A modem apparatus comprising:

a sampling section that samples a reception signal;

a multiplier that calculates a product of the present sampling data by the sampling data 1 data unit ahead;

an adder that adds up product values calculated for every sampling by going back to the time point 1 data unit ahead; and

a detector that detects a reference timing with regard to a CP signal using the addition value calculated by said adder.

2. The modem apparatus according to claim 1, wherein said detector detects a minimum value from the time series data of said addition value and recognizes the sampling timing corresponding to the detected minimum value as said reference timing.

3. The modem apparatus according to claim 1, wherein said detector detects a sampling timing at which the sum total of products of each sampling data item corresponding to the final symbol of a reverb signal sent in an initializing signal by each sampling data item corresponding to the first symbol of a segue signal sent following said reverb signal is output as said reference timing.

4. The modem apparatus according to claim 2, wherein the position 9 symbols ahead of the sampling timing corresponding to said minimum value is recognized as the beginning of the CP signal.

5. An ADSL terminal side apparatus equipped with the modem apparatus according to claim 1.

6. An ADSL station side apparatus equipped with the modem apparatus according to claim 1.

7. A communication apparatus equipped with the modem apparatus according to claim 1.

8. A communication control method comprising :

sampling a reception signal;

calculating a product of the present sampling data by the sampling data 1 data unit ahead;

adding up product values calculated for every sampling by going back to the time point 1 data unit ahead; and

detecting a reference timing with regard to a CP signal using said addition value.

9. The communication control method according to claim 8, wherein a minimum value is detected from the time series data of said addition value and the sampling

timing corresponding to the detected minimum value is recognized as said reference timing.

10. The communication control method according to claim 8, wherein a sampling timing at which the sum total of products of each sampling data item corresponding to the final symbol of a reverb signal sent in an initializing signal by each sampling data item corresponding to the first symbol of a segue signal sent following said reverb signal is output is detected as said reference timing.